

WHAT IS CLAIMED IS:

1 1. An isolated nucleic acid molecule comprising a
 2 polynucleotide sequence having a subsequence which specifically hybridizes
 3 under stringent conditions to a sequence selected from the group consisting of
 4 ~~SEQ. ID. No. 2, SEQ. ID. No. 3, SEQ. ID. No. 4, SEQ. ID. No. 5, SEQ.~~
 5 ~~ID. No. 6, SEQ. ID. No. 7, SEQ. ID. No. 8, SEQ. ID. No. 9, SEQ. ID. No.~~
 6 10, SEQ. ID. No. 12, AND SEQ. ID. No. 13.

1 2. The isolated nucleic acid of claim 1, wherein the
 2 subsequence specifically hybridizes under stringent conditions to ~~SEQ. ID. No. 2~~
 3 ~~2.~~ ^{SEQ ID NO:2}

1 3. The isolated nucleic acid of claim 2, wherein the
 2 subsequence is ~~SEQ. ID. No. 2.~~ ^{SEQ ID NO:2}

1 4. The isolated nucleic acid of claim 1, wherein the
 2 subsequence specifically hybridizes to ~~SEQ. ID. No. 3.~~ ^{SEQ ID NO:3}

1 5. The isolated nucleic acid of claim 4, wherein the
 2 polynucleotide is ~~SEQ. ID. No. 3.~~ ^{SEQ ID NO:3}

1 6. The isolated nucleic acid of claim 1, wherein the
 2 subsequence specifically hybridizes under stringent conditions to ~~SEQ. ID. No. 4~~
 3 ~~4.~~ ^{SEQ ID NO:4}

1 7. The isolated nucleic acid of claim 6, wherein the
 2 subsequence is ~~SEQ. ID. No. 4.~~ ^{SEQ ID NO:4}

1 8. The isolated nucleic acid of claim 1, wherein the
 2 subsequence specifically hybridizes under stringent conditions to ~~SEQ. ID. No. 5~~
 3 ~~5.~~ ^{SEQ ID NO:5}

1 9. The isolated nucleic acid of claim 8, wherein the
2 subsequence is ~~SEQ. ID. No. 5.~~ ^{SEQ ID NO: 5}
↑

1 10. The isolated nucleic acid of claim 1, wherein the
2 subsequence specifically hybridizes under stringent conditions to ~~SEQ. ID. No.~~ ^{SEQ ID NO: 6}
3 ~~β.~~ ↑

1 11. The isolated nucleic acid of claim 10, wherein the
2 subsequence is ~~SEQ. ID. No. 6.~~ ^{SEQ ID NO: 6}
↑

1 12. The isolated nucleic acid of claim 1, wherein the
2 subsequence specifically hybridizes under stringent conditions to ~~SEQ. ID. No.~~ ^{SEQ ID NO: 7}
3 ~~π.~~ ↑

1 13. The isolated nucleic acid of claim 12, wherein the
2 subsequence is ~~SEQ. ID. No. 7.~~ ^{SEQ ID NO: 7}
↑

1 14. The isolated nucleic acid of claim 1, wherein the
2 subsequence specifically hybridizes under stringent conditions to ~~SEQ. ID. No.~~ ^{SEQ ID NO: 8}
3 ~~8.~~ ↑

1 ^{Sub a4} 15. The isolated nucleic acid of claim 14, 16, 18, 20, wherein
2 the subsequence is SEQ. ID. No. 8.

1 16. The isolated nucleic acid of claim 1, wherein the
2 subsequence specifically hybridizes under stringent conditions to ~~SEQ. ID. No.~~ ^{SEQ ID NO: 9}
3 ~~9.~~ ↑

1 17. The isolated nucleic acid of claim 16, wherein the
2 subsequence is ~~SEQ. ID. No. 9.~~ ^{SEQ ID NO: 9}
↑

1 18. The isolated nucleic acid of claim 1, wherein the
2 subsequence specifically hybridizes under stringent conditions to ~~SEQ. ID. No.~~
3 ~~10.~~ *SEQ ID NO:10*

1 19. The isolated nucleic acid of claim 18, wherein the
2 subsequence is ~~SEQ. ID. No. 10.~~ *SEQ ID NO:10*

1 20. The isolated nucleic acid of claim 1, wherein the
2 subsequence specifically hybridizes under stringent conditions to ~~SEQ. ID. No.~~
3 ~~12.~~ *SEQ ID NO:12*

1 21. The isolated nucleic acid of claim 20, wherein the
2 subsequence is ~~SEQ. ID. No. 12.~~ *SEQ ID NO:12*

1 22. The isolated nucleic acid of claim 1, wherein the
2 subsequence specifically hybridizes under stringent conditions to ~~SEQ. ID. No.~~
3 ~~13.~~ *SEQ ID NO:45*

1 23. The isolated nucleic acid of claim 22, wherein the
2 subsequence is ~~SEQ. ID. No. 12.~~ *SEQ ID NO:45*

1 24. The isolated nucleic acid of claim 1, further comprising a
2 promoter sequence operably linked to the polynucleotide sequence.

1 25. The isolated nucleic acid of claim 1, which nucleic acid is
2 a cDNA molecule.

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26. A method of screening for neoplastic cells in a sample, the method comprising:

contacting a nucleic acid sample from a human patient with a probe which hybridizes selectively to a target polynucleotide sequence comprising a sequence selected from the group consisting of ~~SEQ. ID. No. 1, SEQ. ID. No. 2, SEQ. ID. No. 3, SEQ. ID. No. 4, SEQ. ID. No. 5, SEQ. ID. No. 6, SEQ. ID. No. 7, SEQ. ID. No. 8, SEQ. ID. No. 9, SEQ. ID. No. 10, SEQ. ID. No. 11, SEQ. ID. No. 12, and, SEQ. ID. No. 13~~ wherein the probe is contacted with the sample under conditions in which the probe hybridizes selectively with the target polynucleotide sequence to form a stable hybridization complex; and detecting the formation of a hybridization complex.

27. The method of claim 26, wherein the nucleic acid sample is from a patient with breast cancer.

28. The method of claim 26, wherein the nucleic acid sample is a metaphase spread or a interphase nucleus.

29. The method of claim 26, wherein the probe comprises a polynucleotide sequence as set forth in ~~SEQ. ID. No. 1~~ *SEQ ID NO: 1*

30. The method of claim 26, wherein the probe comprises a polynucleotide sequence as set forth in ~~SEQ. ID. No. 2~~ *SEQ ID NO: 2*

31. The method of claim 26, wherein the probe comprises a polynucleotide sequence as set forth in ~~SEQ. ID. No. 3~~ *SEQ ID NO: 3*

32. The method of claim 26, wherein the probe comprises a polynucleotide sequence as set forth in ~~SEQ. ID. No. 4~~ *SEQ ID NO: 4*

33. The method of claim 26, wherein the probe comprises a polynucleotide sequence as set forth in ~~SEQ. ID. No. 5~~ *SEQ ID NO: 5*

1 34. The method of claim 26, wherein the probe comprises a
2 polynucleotide sequence as set forth in ~~SEQ. ID. No. 6~~ ^{SEQ ID NO: 6}.

1 35. The method of claim 26, wherein the probe comprises a
2 polynucleotide sequence as set forth in ~~SEQ. ID. No. 7~~ ^{SEQ ID NO: 7}.

1 36. The method of claim 26, wherein the probe comprises a
2 polynucleotide sequence as set forth in ~~SEQ. ID. No. 8~~ ^{SEQ ID NO: 8}.

1 37. The method of claim 26, wherein the probe comprises a
2 polynucleotide sequence as set forth in ~~SEQ. ID. No. 9~~ ^{SEQ ID NO: 9}.

1 38. The method of claim 26, wherein the probe comprises a
2 polynucleotide sequence as set forth in ~~SEQ. ID. No. 10~~ ^{SEQ ID NO: 10}.

1 39. The method of claim 26, wherein the probe comprises a
2 polynucleotide sequence as set forth in ~~SEQ. ID. No. 12~~ ^{SEQ ID NO: 12}.

1 40. The method of claim 26, wherein the probe comprises a
2 polynucleotide sequence as set forth in ~~SEQ. ID. No. 13~~ ^{SEQ ID NO: 45}.

1 41. The method of claim 26, wherein the probe is used to
2 identify the presence of a mutation in the target polynucleotide sequence.

42. A method for detecting a neoplastic cell in a biological sample, the method comprising:

contacting the sample with an antibody that specifically binds a polypeptide antigen encoded by a polynucleotide sequence comprising a sequence selected from the group consisting of ~~SEQ. ID. No. 1, SEQ. ID. No. 2, SEQ. ID. No. 3, SEQ. ID. No. 4, SEQ. ID. No. 5, SEQ. ID. No. 6, SEQ. ID. No. 7, SEQ. ID. No. 8, SEQ. ID. No. 9, SEQ. ID. No. 10, SEQ. ID. No. 11, and SEQ. ID. No. 12~~; and

detecting the formation of an antigen-antibody complex.

43. The method of claim 42, wherein the sample is from breast tissue.

44. A method of inhibiting the pathological proliferation of cancer cells, the method comprising inhibiting the activity of a gene product of an endogenous gene having a subsequence which hybridizes under stringent conditions to a sequence selected from the group consisting of ~~SEQ. ID. 1, SEQ. ID. No. 2, SEQ. ID. No. 3, SEQ. ID. No. 4, SEQ. ID. No. 5, SEQ. ID. No. 6, SEQ. ID. No. 7, SEQ. ID. No. 8, SEQ. ID. No. 9, SEQ. ID. No. 10, SEQ. ID. No. 11, and SEQ. ID. No. 12~~.

45. A method of detecting a cancer, said method comprising detecting the overexpression of a protein encoded in a 20q13 amplicon.

46. The method of claim 41, wherein said protein encoded in a 20q13 amplicon is ZABC1.

47. The method of claim 41, wherein said protein encoded in a 20q13 amplicon is 1b1.

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